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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/028,726	02/24/1998	MATTI JOKIMIES	297-007856-U	5120

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EXAMINER

APPIAH, CHARLES NANA

ART UNIT

PAPER NUMBER

2682

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12

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/028,726

Applicant(s)

JOKIMIES, MATTI

Examiner

Charles Appiah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Fernandes et al. (GB 2 285 556)**.

Regarding claims 1, 4 and 6 Fernandes discloses, as illustrated in figures 1 and 2, a cellular radio system, a cellular radio system terminal and a method to realize cell prioritizing, which comprises terminals (12), cells (20, 21, 22, 24), and a network including stationary network equipment (PBS, PSTN/ISDN). According to Fernandes, personal base station have all the characteristics of a preferred mobile station pre-programmed in its system and that the personal base station and the mobile station are a pre-programmed pair (see page 3, line 32 to page 4, line 3), and that a personal base station can use a broadcast control channel to transmit an identity of its preferred mobile station and this information is recognized and used by the mobile station in locking on to as a cell of preference in making a cell selection (see page 4, line 33 to

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page 5, line 7), thus anticipating the use of information specific to a terminal stored in and received from the network by a mobile terminal in selecting a favorable cell.

4. Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Barnett et al. (5,428,816)**.

Regarding claims 1, 4, and 6 Barnett discloses, as illustrated in Fig. 1, a cellular radio system, a cellular radio system terminal and a method to realize cell prioritizing in a cellular radio system comprising terminals (33), cells (areas defined by BTS 26, 28, 30 - A, B, C, D, Fig. 4), and a network including stationary equipment (12, 14, 16, 20, 22, 24...), of which the terminals are arranged to set up and maintain radio communication with base stations ((26, 28, 30) in the cells (see col. 3, lines 26-55). According to Barnett, at least one terminal is arranged to favor at least one cell based on data specific to that terminal stored in and received from the network with respect to other cells (feature of handoff process being initiated the particular cell meeting all criteria for handoff as determined from the CQM message report from measurement order command sent to mobile unit to perform measurements which result is sent to the base station of the serving cell, see col. 5, lines 34-62, col. 7, line 1 to col. 8, line 68).

Claim Rejections - 35 USC § 103

5. Claims 2, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable **over Barnett et al** as applied to claims 1, 4 and 6 above, and further in view of **Westerberg (6,058,302)**.

With respect to claim 2, Barnett fails to teach storing cell priority data in the stationary network equipment.

Westerberg discloses a system in which, in response to a transmission of a conventional cell update request message or uplink initiation transfer message by a subscriber of a private network, both the public network and the private network transmit information that could include information about cell identity, priority class, temporary offsets to use, etc., (see col. 5, lines 24-49), which information is received and stored in internal memory by the mobile terminal (see col. 5, line 49 to col. 6, line 2), thus suggesting the provision of information stored in the networks to the mobile terminal. According to Westerberg, by providing information to the mobile terminals regarding a private network and a public network to a mobile subscriber, the subscribing terminal is able to fully use features such as handovers between cells, or HCS for prioritizing the use of cells (see col. 3, lines 21-27).

It would therefore have been obvious to one of ordinary skill in the art to incorporate the above teaching of Westerberg by making information on the networks available to a subscriber in the system of Barnett in order for the subscriber to be able to fully use such features as prioritizing the use of cells in the network.

With respect to claims 3 and 7, Barnett fails to specifically disclose that the stationary network equipment is arranged to supply information to the terminal about priority data relating to the terminal, as a response to one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in the database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal.

Westerberg discloses a system in which, in response to a transmission of a conventional cell update request message or uplink initiation transfer message by a subscriber of a private network (reads on the terminal registers with the cellular radio system, and the terminal's location data changes in the cellular radio system), both the public network and the private network transmit information that could include information about cell identity, priority class, temporary offsets to use, etc., (see col. 5, lines 24-49), which information is received and stored in internal memory by the mobile terminal (see col. 5, line 49 to col. 6, line 2), thus suggesting the provision of information stored in the networks to the mobile terminal.

It would therefore have been obvious to one of ordinary skill in the art, at the time of the invention to provide the above teaching of Westerberg with the system of Alford for the benefit of controlling the provision of desired information needed for communications.

6. Claims 5 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over **Barnett et al** and **Westerberg** as applied to claims 4 and 6 above, and further in view of **Wang et al. (5,649,289)**.

With respect to claims 5 and 8, Westerberg further discloses that, based on information on the subscription of a mobile terminal regarding both a public cell and private cell, the subscribing mobile terminal will be able to consider both public cell and private cell for cell re-selection should it move to the coverage area of one of those cells (see col. 5, lines 18-23).

The combination of Barnett and Westerberg, however, fail to specifically disclose

that the terminal is further arranged to maintain a list of possible cells for re-selection and to arrange the list in an order, which is based on a parameter, calculated for each cell, in which for priority cells, the terminal is arranged to alter the parameter calculation relating to the cell, so that the parameter has a particular advantageous value in the case of a priority cell.

Wang discloses a communication system that uses indexes in determining cells which are considered part of a preferred list for a customer paging area for a mobile subscriber (see col. 5, lines 35-67).

It would therefore have been obvious to one of ordinary skill in the art to incorporate the teaching of Wang into the system of Barnett and Westerberg in order to identify the characteristics of preferable cells for cell system.

Barnett and Westerberg, as modified by Wang, fail to specifically teach the terminal being arranged to maintain a list of possible cells for cell re-selection in an Order, which is based on a parameter, calculated for each cell, in which for priority cells, it is arranged to alter the parameter calculation relating to the cell so that the parameter gets a particularly advantageous value in the case of a priority cell.

However, it is very well known in the art to use certain defined parameters in maintaining cell re-selection data to favor priority cells as taught by Wang. Wang teaches the use of a user's office or home location in assigning a cell of preference (see col. 4, lines 32-45).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Wang with the system of Barnett and Westerberg for the benefit of

ensuring the selection of priority cells for communication in order to reduce charges for mobile subscribers.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Barnett et al, Westerberg** and **Wang et al** as applied to claim 8 above, and further in view of ETSI (**European Telecommunications Standards Institute**), **ETS 300 535 (GSM 03.22 version 4.10.0)**.

With respect to claims 9 and 10 Barnett and Westerberg as modified by Wang, (as taught by Wang) further teach priority data relating to a terminal includes at least the priority cell identity (see FIG. 2), and Westerberg further discloses the inclusion of information on permanent offsets to use in the control information transmitted to a subscriber (see col. 5, lines 42-49). However, Barnett as modified by Westerberg and Wang fail to specifically teach information as to whether or not the terminal shall apply an offset parameter, a delay factor relating to the cell and cell re-selection hysteresis in the calculation of the parameter relating to a priority cell in a situation where cell re-selection represents shifting from a non-priority cell to a priority cell.

However, it is known in the art to use cell re-selection hysteresis and the use of a delay factor in calculating parameters relating to cell re-selection as taught by GSM 03.22 version 4.10.0. The specification teaches that for cell re-selection in cell prioritization, a hysteresis factor as well as an offset value can be used in determining a parameter (C2) (see sections 3.4- 3.5.2.2)

It would therefore have been obvious to one of ordinary skill in the art to use a delay factor in the system of Barnett, Westerberg and Wang as taught by ETSI standard

for cell re-selection hysteresis in making decisions regarding movement to and from priority cells as desired for the benefit of encouraging or discouraging re-selection of specific prioritized cells.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Buhrmann et al. (5,950,125) discloses a location-dependent cellular service profile.

9. Dufour et al. (5,850,604) discloses a system for restricting access to a fixed subscription area.

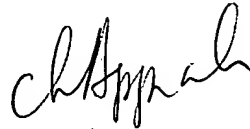
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is 703 305-4772. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703 305-6739. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9314 for regular communications and 703 308-6296 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4750.

Charles Appiah
April 16, 2002

A handwritten signature in cursive script, appearing to read 'Ch Appiah', written in black ink.

**CHARLES APPIAH
PATENT EXAMINER**